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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,149	03/26/2004	Ted R. Michaud	D03087	8369

7590 09/14/2006

GENERAL INSTRUMENT CORPORATION
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Horsham, PA 19044

EXAMINER

HASSAN, AURANGZEB

ART UNIT PAPER NUMBER

2182

DATE MAILED: 09/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/810,149	Applicant(s) MICHAUD, TED R.	
	Examiner Aurangzeb Hassan	Art Unit 2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Fritz Fleming
FRITZ FLEMING
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100
9/8/2006

Attachment(s)

- | | |
|---|--|
| <p>1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____</p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>6) <input type="checkbox"/> Other: _____</p> |
|---|--|

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 25 – 31 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. In the preamble claims 25 – 31 recite “A computer-readable carrier”. A computer readable carrier does not fall into one of the four statutory categories. According to the applicant’s specification a computer readable carrier includes tangible and intangible medium such as computer memory and propagation medium respectively. As an example the examiner suggests corrections in order to fall into one of the four statutory categories by exhibiting tangible sources of computer readable medium and further modify “computer readable carrier including computer program instructions” to recite “computer readable storage medium with instructions stored thereon which when executed”.

3. To expedite a complete examination of the instant application, the claims rejected under 35 U.S.C. 101 (non-statutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1, 8 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 8 and 16 recite the limitation "the appropriate USB driver" in line 6, 4 and 6 respectively. There is insufficient antecedent basis for this limitation in the claim.

Claims 1 and 8 recite the limitation "the USB device" in line 6 and 4 respectively. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1 – 15 and 21 – 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Katz et al. (US Publication Number 2002/0065950 hereinafter "Katz").

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8. As per claims 1 and 25 Katz teaches a method, apparatus and computer readable storage medium of providing USB device support in an interactive system, said method comprising the steps of: determining USB device information (performing Step 628 of figure 6d for the USB device 502, figure 5); communicating the USB device information to a USB server (step 630 of figure 6d conducted with Server 106, figure 1); and, receiving a driver functionality message comprising information concerning the appropriate USB driver to support the USB device (step 632, figure 6d). (For further mapping of claim 16, the memory component of the USB device can be found in figure 3 as the USB device has memory associated therein)

9. As per claim 2, Katz teaches a method wherein determining USB device information comprises analyzing the USB device via a USB connection (connection from 502 to 202 in figure 5 is via USB paragraph [0004], Peripheral Interface Agent, PIA 712, figure 7, paragraphs [0090&0091]).

10. As per claims 3 and 28, Katz teaches a method, apparatus and computer readable storage medium wherein communicating the USB device information to a USB server comprises communicating the USB device information to the USB server via an interactive path across a network (figure 1 shows the network interactive path from the client 110 on which the USB device is connected to the USB server 106).

11. As per claims 4, 29 and 30 Katz teaches a method, apparatus and computer

readable storage medium wherein communicating the USB device information to a USB server comprises communicating the USB device information to the USB server via an interactive path across a wireless network (paragraph [0025&0032]).

12. As per claim 5, Katz teaches a method and apparatus wherein communicating the USB device information to a USB server comprises communicating the USB device information to the USB server via an interactive path across a cable network (paragraph [0032&0065]).

13. As per claims 6 and 31, Katz teaches a method and computer readable storage medium wherein receiving a driver functionality message comprises receiving a message comprising functionality for the appropriate USB driver for the USB device via an intermediate message protocol (the intermediary signal is used to communicated for driver allocation from the server, paragraph [0085]).

14. As per claim 7, Katz teaches a method wherein receiving a driver functionality message comprises receiving a message comprising the appropriate USB driver (intermediary signal sent for driver transmission and installation, paragraph [0091]).

15. As per claim 8, Katz teaches a method of providing USB device support to a home gateway device (STB 202 in figure 2) in an interactive system (STB 202 is in MSTV Client 110, figure 1), said method comprising the steps of: receiving USB device

information (performing Step 628 of figure 6d for the USB device 502, figure 5); determining the appropriate USB driver for the USB device (step 630 of figure 6d conducted with Server 106, figure 1); and, communicating a driver functionality message comprising USB driver functionality for the appropriate USB driver (step 632, figure 6d).

16. As per claim 9, Katz teaches a method wherein determining the USB driver for the USB device comprises determining a type of USB device by analyzing the USB device information (Peripheral Interface Agent, PIA 712, figure 7, paragraphs [0090&0091]).

17. As per claim 10, Katz teaches a method wherein communicating a driver functionality message comprises communicating a message comprising instructions for the home gateway device based on the USB driver for the type of USB device (step 632 figure 6d, where the intermediary signal is used to communicated for driver allocation from the server, paragraph [0085]).

18. As per claim 11, Katz teaches a method wherein communicating a driver functionality message to the home gateway device comprises communicating a message comprising the USB driver (intermediary signal sent for driver transmission and installation, paragraph [0091]).

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19. As per claim 12, Katz teaches an apparatus for providing USB class support in an interactive system, said apparatus comprising: a USB port for connecting to comprising to a USB device (peripherals connected via USB connected via USB ports, paragraph [0004]); and, a network connection to a USB server (figure 1, paragraphs [0025, 0032, 0065]); wherein the apparatus determines USB device information (step 630 of figure 6d conducted with Server 106, figure 1), communicates the USB device information to a USB server, and receives a driver functionality message to support the USB device (step 632, figure 6d).

20. As per claim 13, Katz teaches an apparatus wherein said USB port is coupled to a USB hub (USB hub functionality allows for more than one USB device to be connected, figure 5, paragraph [0080] allows for more than one USB peripheral to be connected).

21. As per claim 14, Katz teaches an apparatus wherein said network connection to a USB server comprises a network connection via a wireless network to a USB server (paragraphs [0025&0032]).

22. As per claim 15, Katz teaches an apparatus wherein said network connection to a USB server comprises a network connection via a cable network to a USB server (paragraphs [0032&0065]).

23. As per claim 21, Katz teaches a system for providing USB class support in an interactive system, said apparatus comprising: a home gateway device, said home gateway device comprising a USB port coupled to a USB device (peripherals connected via USB connected via USB ports, paragraph [0004]) and a network connection to a network (figure 1, paragraphs [0025, 0032, 0065]); a USB server, said USB server comprising a USB memory device for storing USB driver information associated with a USB driver and a network connection to a network (MSTV Server has proper storage of drivers and is networked to the MSTV client, figure 1); wherein said system communicates USB device information from the home gateway device to the USB server, and communicates a driver functionality message from the USB server to the home gateway device (figure 6d).

24. As per claim 22, Katz teaches a system wherein said home gateway device network connection and said USB server network connection create an interactive path between the USB server and the home gateway device (paragraphs [0002,0003], figure 1).

25. As per claim 23, Katz teaches a system wherein said interactive path provides for driver functionality messages to be communicated from the USB server to the home gateway device via an intermediate messaging protocol (the intermediary signal is used to communicated for driver allocation from the server, paragraph [0085]).

26. As per claim 24, Katz teaches a system wherein said interactive path is supported by a cable network (paragraphs [0032&0065]).

27. As per claim 26, Katz teaches a computer readable medium wherein accepting a USB device via a connection to a USB port comprises receiving the USB device through a connection to a USB port on a USB hub (USB hub functionality allows for more than one USB device to be connected, figure 5, paragraph [0080] allows for more than one USB peripheral to be connected).

28. As per claim 27, Katz teaches a computer readable medium wherein determining USB device information comprises analyzing the USB device via the USB connection to determine the type of USB device (connection from 502 to 202 in figure 5 is via USB paragraph [0004], Peripheral Interface Agent, PIA 712, figure 7, paragraphs [0090&0091]).

Claim Rejections - 35 USC § 103

29. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

30. Claims 16 – 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katz in view of Perlman et al. (US Patent Number 6,269,481 hereinafter "Perlman").

31. As per claims 16 and 17 Katz teaches an apparatus for providing USB device support in an interactive system, said method comprising the steps of: determining USB device information (performing Step 628 of figure 6d for the USB device 502, figure 5); communicating the USB device information to a USB server (step 630 of figure 6d conducted with Server 106, figure 1); and, receiving a driver functionality message comprising information concerning the appropriate USB driver to support the USB device (step 632, figure 6d).

Katz further discloses a peripheral to consist of USB memory devices (paragraph [0078]) yet fails to explicitly disclose storing the driver in the USB memory peripheral device.

Perlman teaches utilizing a memory device and storing the appropriate driver therein (column 1, lines 47 – 52).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify Katz with the above teachings of Perlman. One of ordinary skill in the art would be motivated to make such modification in order to increase efficiency and ease of use for the user (column 1, lines 34 – 38).

32. As per claim 18, Katz teaches a method, apparatus and computer readable storage medium wherein communicating the USB device information to a USB server comprises communicating the USB device information to the USB server via an

interactive path across a network (figure 1 shows the network interactive path from the client 110 on which the USB device is connected to the USB server 106).

33. As per claim 19 Katz teaches a method, apparatus and computer readable storage medium wherein communicating the USB device information to a USB server comprises communicating the USB device information to the USB server via an interactive path across a wireless network (paragraph [0025&0032]).

34. As per claim 20, Katz teaches a method and apparatus wherein communicating the USB device information to a USB server comprises communicating the USB device information to the USB server via an interactive path across a cable network (paragraph [0032&0065]).

Conclusion

35. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aurangzeb Hassan whose telephone number is (571) 272-8625. The examiner can normally be reached on Monday - Friday 9 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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9/8/2006